

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD2089_01_s _ 2013_4				
Comment Code					
Inspector Comment					
The O&M Manual is available at the LMA's office.					

No Photos

LM Start		Rating **	A	Issue No.	15
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD2089_01_s _ 2013_15				
Comment Code					
Inspector Comment					
The LMA has flood fighting supplies on-site.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start		Rating **	M	Issue No.	34
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD2089_01_s_2013_34				
Comment Code					
Inspector Comment					
The LMA has not attended a flood fight training class in the past few years. They do have an emergency plan.					

No Photos

LM Start	0.04	Rating **	M	Issue No.	1
LM End	0.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		37.811474°	37.811474°	
			-121.385573°	-121.385573°	
DWR ID	DWR_RD2089_01_s_2012_1				
Comment Code					
ST : Stairway					
Inspector Comment					
Steps have been cut into the levee slope, this could become an erosion point, please fill and compact.					

Photo 1 of 1 : FA_2016_RD2089_316_1_20160914_00001.jpg



View of the stairs eroding into the landside levee slope.

LM Start	0.04	Rating **	M	Issue No.	30
LM End	0.24	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		37.811474°	37.810451°	
			-121.385573°	-121.389109°	
DWR ID	DWR_RD2089_01_f_2016_30				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD2089_316_30_20161017_00045.jpg



View of the vegetation on the landside levee slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.33	Rating **	U	Issue No.	19
LM End	0.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.810002 °	37.810002 °
				-121.390674 °	-121.390674 °
DWR ID	DWR_RD2089_01_s_2012_19				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Arundo is thick and blocks visibility and access.					

Photo 1 of 2 : FA_2016_RD2089_316_19_20161017_00051.jpg



View of the arundo back on the landside levee slope. Fall 2016

LM Start	0.33	Rating **	U	Issue No.	19 (cont)
LM End	0.33	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD2089_316_19_20160914_00015.jpg



Arundo was trimmed back from the road and needs to be maintained so that it does not obstruct visibility and access to the landside toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.41	Rating **	M	Issue No.	28
LM End	0.46	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.809593 °	37.809507 °
				-121.391963 °	-121.392907 °
DWR ID	DWR_RD2089_01_s_2012_28				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Vegetation is too thick to allow access and visibility. Some thick patches of shrubs remain and continue to block visibility and access.					

Photo 1 of 1 : FA_2016_RD2089_316_28_20160914_00018.jpg



05/24/2011 Photo shows thick dead vegetation and continuation of trees in area that are preventing access and visibility of landside slope and toe.

LM Start	0.46	Rating **	M	Issue No.	5
LM End	0.46	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.809394 °	37.809394 °
				-121.392791 °	-121.392791 °
DWR ID					
Comment Code					
Inspector Comment					
07/25/2016: No significant change observed.					
06/25/2015: No significant change observed.					
07/02/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site has been visited by boat survey. No significant change observed					
08/23/2011: The site shows loose material around the pipe crossing.					
The operation of the pipe might have caused an impact on the levee.					
[2016 Site ID:RD2089U01RM29.8]					

Photo 1 of 2 : SJR2016_RD2089U01RM29.8_1.jpg



Front view of the site. Note the irrigation pipe on the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

Reclamation District No. 2089 Stark

Close view of the site.

View of the vegetation on the landside levee slope.

Page 6 of 16

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.50	Rating **	U	Issue No.	29
LM End	0.55	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.809814 °	37.810132 °
				-121.393481 °	-121.394234 °
DWR ID	DWR_RD2089_01_f_2016_29				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Tumbleweeds are on the levee slope.					

Photo 1 of 1 : FA_2016_RD2089_316_29_20161017_00050.jpg



View of the vegetation on the waterside levee slope.

LM Start	0.54	Rating **	M	Issue No.	14
LM End	0.54	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.810087 °	37.810087 °
				-121.394200 °	-121.394200 °
DWR ID	DWR_RD2089_01_s_2012_14				
Comment Code					
C3 : Add appropriate gravel or road base. Grade and compact.					
Inspector Comment					
11/10/2011 Minor depressions will cause ponding.					

Photo 1 of 1 : FA_2016_RD2089_316_14_20160914_00012.jpg



11/10/2011 Depressions in crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

Reclamation District No. 2089 Stark

Page 8 of 16

Reclamation District No. 2089 Stark

View of the vertical cut along the landside levee toe.

View of the vegetation on the waterside levee slope.

Page 9 of 16

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.94	Rating **	A/W	Issue No.	33
LM End	0.94	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.806397°	37.806397°
				-121.397758°	-121.397758°
DWR ID	DWR_RD2089_01_s_2012_33				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Arundo on waterside impedes visibility and access to waterside slope.					

Photo 1 of 1 : FA_2016_RD2089_316_33_20160914_00019.jpg



Arundo was trimmed back and needs to be maintained to allow visibility and access.

LM Start	1.02	Rating **	M	Issue No.	956	
LM End	1.02	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.806026 °		37.806026 °
				-121.399206 °		-121.399206 °
DWR ID	DWR_RD2089_01_s_2012_956					
Comment Code						
V4 : Elderberries are blocking visibility and flood fight capability.						
Inspector Comment						
Elderberry and tobacco block visibility.						

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	1.07	Rating **	U	Issue No.	957
LM End	1.07	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.805848°	37.805848°
				-121.400003°	-121.400003°
DWR ID	DWR_RD2089_01_s_2012_957				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Brush blocks access.					

No Photos

LM Start	1.12	Rating **	M	Issue No.	16
LM End	1.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.805699 °	37.805699 °
				-121.400952 °	-121.400952 °
DWR ID	DWR_RD2089_01_f_2014_16				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Some rodent holes have collapsed. Backfill the remaining voids in the levee slope.					

Photo 1 of 1 : FA_2016_RD2089_316_16_20160914_00013.jpg



View of the rodent burrow on the landside levee slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

Reclamation District No. 2089 Stark

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	1.23	Rating **	M	Issue No.	2
LM End	1.24	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.805580 °	37.805580 °
				-121.403010 °	-121.403010 °
DWR ID					

Comment Code

Inspector Comment

09/16/2016: The river was not navigable near the site due to the dense water grass, so the site was visited by land survey. No significant change observed.
 06/25/2015: No significant change observed.
 07/02/2014: No significant change observed.
 08/13/2013: The erosion is around a tree at the levee toe. Dense vegetation is visible. [2016 Site ID:RD2089U01RM29.04]

LM Start	1.23	Rating **	M	Issue No.	2 (cont)
LM End	1.24	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : SJR2016_RD2089U01RM29.04_1.jpg



View of the erosion from levee slope.

Photo 2 of 2 : SJR2016_RD2089U01RM29.04_4.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

Photo 1 of 1 : FA_20160914_00022.jpg



11/10/2011 Roadway depression.

Photo 1 of 1 : FA_2016_RD2089_316_20_20161017_00046.jpg



View of the vegetation on the landside levee slope.

Photo 1 of 1 : FA_2016_RD2089_316_45_20160914_00023.jpg



11//10/2011 Roadway depression.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	1.40	Rating **	M	Issue No.	47
LM End	1.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.806268 °	37.806268 °
				-121.405874 °	-121.405874 °
DWR ID	DWR_RD2089_01_s_2012_47				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
11/10/2011 No rodents visible, but active burrows are present.					

Photo 1 of 1 : FA_2016_RD2089_316_47_20160914_00025.jpg



11/10/2011 Active rodent burrow on landside slope.

LM Start	1.40	Rating **	M	Issue No.	46
LM End	1.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.806266 °	37.806266 °
				-121.405876 °	-121.405876 °
DWR ID	DWR_RD2089_01_s_2012_46				
Comment Code					
TR : Tree or limb					
Inspector Comment					
11/10/2011 Downed tree at levee toe prevents access to levee from landside.					

Photo 1 of 1 : FA_2016_RD2089_316_46_20160914_00024.jpg



Decaying tree at the landside levee toe is obstructing visibility and access.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	1.40	Rating **	U	Issue No.	26
LM End	1.40	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.806306 °	37.806306 °
				-121.405952 °	-121.405952 °
DWR ID	DWR_RD2089_01_f_2015_26				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Rodent hole is at least 4 ft. deep and needs to be backfilled and compacted.					

Photo 1 of 1 : FA_2016_RD2089_316_26_20160914_00017.jpg



View of the rodent hole on the levee crown.

LM Start	1.44	Rating **	M	Issue No.	49
LM End	1.44	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.806383 °	37.806383 °
				-121.406599 °	-121.406599 °
DWR ID	DWR_RD2089_01_s_2012_49				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Deep burrow on waterside needs to be filled.					

Photo 1 of 1 : FA_2016_RD2089_316_49_20160914_00026.jpg



11/10/2011 Deep burrow on waterside.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.06	Rating **	U	Issue No.	20
LM End	0.06	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.807341°	37.807341°
				-121.408686°	-121.408686°
DWR ID	DWR_RD2089_02_s_2016_20				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD2089_317_20_20160914_00016.jpg



View of the vegetation on the landside levee slope.

LM Start	0.07	Rating **	U	Issue No.	4
LM End	0.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.807375 °	37.807375 °
				-121.408605 °	-121.408605 °
DWR ID	DWR_RD2089_02_s_2012_4				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Thick brush may include some elderberries.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.16	Rating **	U	Issue No.	48
LM End	0.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.808583 °	37.808583 °
				-121.409432 °	-121.409432 °
DWR ID	DWR_RD2089_02_f_2013_48				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD2089_317_48_20160914_00032.jpg



View of the rodent burrow on the landside levee slope.

LM Start	0.21	Rating **	M	Issue No.	49
LM End	0.21	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.809148 °	37.809148 °
				-121.409897 °	-121.409897 °
DWR ID	DWR_RD2089_02_f_2013_49				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD2089_317_49_20160914_00033.jpg



View of the multiple rodent burrows on the landside levee hinge and slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

Photo 2 of 3 : FA_2016_RD2089_317_53_20160914_00037.jpg



View of the rodent burrow on the landside levee slope.

Photo 3 of 3 : FA_2016_RD2089_317_53_20160914_00038.jpg



Another view of the multiple rodent burrows on the landside levee slope.

Photo 1 of 1 : FA_2016_RD2089_317_26_20160914_00019.jpg



05/24/2011 Active rodent burrow.

* Location	** Rating	+ Issue Type
LS : Land Side	A : Acceptable	Ma : Maintenance Deficiency
N/A : Not Applicable	N : Not Inspected/Rated	Ob : Design & System Obsolescence
WS : Water Side	M : Minimally Acceptable	En : Enforcement
CR : Crown	U : Unacceptable	
	A/W : Acceptable but Monitor & Maintain	

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.40	Rating **	M	Issue No.	1
LM End	0.41	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.809960 °	37.809960 °
				-121.413200 °	-121.413200 °
DWR ID					

Comment Code

[illegible]

Inspector Comment	

11/05/2008: Cut into levee profile; riprap slide; rodent holes; pictures do not match GPS and current condition. [2016 Site ID:RD2089U02RM28.35]

LM Start	0.40	Rating **	M	Issue No.	1 (cont)
LM End	0.41	Issue Type +	Ma	Location *	WS

View of the site from levee crest.

Close view of the erosion. Note the vegetation at the site.


* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Reclamation District No. 2089 Stark

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

Photo 1 of 1 : FA_2016_RD2089_317_44_20161017_00056.jpg



View of the vegetation on the levee slopes.

Photo 1 of 1 : FA_2016_RD2089_317_14_20160914_00013.jpg



11/10/2011 Approximately 1' scarp has been created by livestock travel.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

Reclamation District No. 2089 Stark

Page 8 of 19

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.66	Rating **	M	Issue No.	43
LM End	0.66	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.812677 °	37.812677 °
				-121.415393 °	-121.415393 °
DWR ID	DWR_RD2089_02_f_2016_43				
Comment Code					
A2 : Repair the levee slope damaged by livestock and prevent large animal access.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD2089_317_43_20161017_00055.jpg



View of the animal paths on the waterside levee slope.

LM Start	0.76	Rating **	M	Issue No.	15
LM End	0.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.813934 °	37.813934 °
				-121.414320 °	-121.414320 °
DWR ID	DWR_RD2089_02_f_2014_15				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD2089_317_15_20160914_00014.jpg



View of the scour from surface runoff on the landside levee slope.

LM Start	0.83	Rating **	M	Issue No.	21
LM End	0.83	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.814773 °	37.814773 °
				-121.414555 °	-121.414555 °
DWR ID	DWR_RD2089_02_s_2012_21				
Comment Code					
A2 : Repair the levee slope damaged by livestock and prevent large animal access.					
Inspector Comment					
Livestock have worn paths into levee slope.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.83	Rating **	M	Issue No.	38
LM End	0.83	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.814844 °	37.814844 °
				-121.414566 °	-121.414566 °
DWR ID	DWR_RD2089_02_s _ 2012_38				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Active burrows present.					

No Photos

LM Start	0.84	Rating **	M	Issue No.	25
LM End	0.84	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.814906 °	37.814906 °
				-121.414745 °	-121.414745 °
DWR ID	DWR_RD2089_02_s _ 2012_25				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Elderberry and blackberry on levee slope.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.84	Rating **	M	Issue No.	42
LM End	0.84	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.814931 °	37.814931 °
				-121.414756 °	-121.414756 °
DWR ID	DWR_RD2089_02_f_2016_42				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Ramp is encroaching into the levee slope. Add appropriate material to stabilize the slope.					

Photo 1 of 1 : FA_2016_RD2089_317_42_20161017_00052.jpg



View of the ramp on the landside levee slope.

LM Start	0.85	Rating **	U	Issue No.	40
LM End	0.90	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.814997 °	37.814970 °
				-121.414774 °	-121.415767 °
DWR ID	DWR_RD2089_02_s_2012_40				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Numerous burrows on landside slope adjacent to hay storage area. Deep burrows in crown and landside ramp.					

Photo 1 of 3 : FA_2016_RD2089_317_40_20160914_00028.jpg



05/24/2011 Deep vertical burrow in ramp on land side of levee.

LM Start	0.85	Rating **	U	Issue No.	40 (cont)
LM End	0.90	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA_2016_RD2089_317_40_20160914_00029.jpg



05/24/2011 Deep vertical burrow in levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	---	--	---	--

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.85	Rating **	U	Issue No.	40 (cont)
LM End	0.90	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.814997 °	37.814970 °
				-121.414774 °	-121.415767 °
DWR ID	DWR_RD2089_02_s_2012_40				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Numerous burrows on landside slope adjacent to hay storage area. Deep burrows in crown and landside ramp.					

Photo 3 of 3 : FA_2016_RD2089_317_40_20160914_00030.jpg



View of the multiple rodent holes on the landside levee slope.

LM Start	0.85	Rating **	U	Issue No.	39
LM End	0.88	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.814967 °	37.815017 °
				-121.414839 °	-121.415455 °
DWR ID	DWR_RD2089_02_f_2016_39				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Tumbleweeds on landside levee hinge and slope.					

Photo 1 of 1 : FA_2016_RD2089_317_39_20161017_00053.jpg



View of the vegetation on the landside levee slope.

LM Start	0.91	Rating **	M	Issue No.	22
LM End	0.91	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.814903 °	37.814903 °
				-121.415887 °	-121.415887 °
DWR ID	DWR_RD2089_02_s_2015_22				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
---	--	--	--	--	--

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	0.94	Rating **	M	Issue No.	41
LM End	0.94	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.814940 °	37.814940 °
				-121.416499 °	-121.416499 °
DWR ID	DWR_RD2089_02_s_2012_41				
Comment Code					
PI : Pipe					
Inspector Comment					
Debris/CMP on levee slope needs to be removed.					

Photo 1 of 1 : FA_2016_RD2089_317_41_20160914_00031.jpg



05/24/2011 Old CMP left on waterside levee slope, needs to be removed.

LM Start	0.95	Rating **	U	Issue No.	5
LM End	0.95	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.814915 °	37.814915 °
				-121.416606 °	-121.416606 °
DWR ID	DWR_RD2089_02_s_2014_5				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD2089_317_5_20160914_00004.jpg



View of the rodent holes on the landside levee slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	1.00	Rating **	U	Issue No.	12
LM End	1.00	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.815182°	37.815182°
				-121.417439°	-121.417439°
DWR ID	DWR_RD2089_02_f_2014_12				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 2 : FA_2016_RD2089_317_12_20160914_00010.jpg



View of several large rodent holes on the levee crown.

LM Start	1.00	Rating **	U	Issue No.	12 (cont)
LM End	1.00	Issue Type +	Ma	Location *	CR

Photo 2 of 2 : FA_2016_RD2089_317_12_20160914_00011.jpg



View of several rodent burrows on landside levee hinge and crown.

LM Start	1.05	Rating **	N	Issue No.	29
LM End	1.05	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.815629 °	37.815629 °
				-121.418133 °	-121.418133 °
DWR ID	DWR_RD2089_02_s_2012_29				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
14" dia stump. Could not verify as the area is overgrown with high weeds.					

Photo 1 of 1 : FA_2016_RD2089_317_29_20160914_00021.jpg



Tree stump >2" left after vegetation and tree removal.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	10/13/2016 10/13/2016	Maksim Khashchuk

LM Start	1.24	Rating **	U	Issue No.	31
LM End	1.24	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.818051°	37.818051°
				-121.419743°	-121.419743°
DWR ID	DWR_RD2089_02_s_2012_31				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	1.24	Rating **	U	Issue No.	28
LM End	1.24	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.818112 °	37.818112 °
				-121.419720 °	-121.419720 °
DWR ID	DWR_RD2089_02_f_2016_28				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD2089_317_28_20161017_00049.jpg



View of the rodent burrow in the landside levee slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

Reclamation District No. 2089 Stark